

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/574,730
Source: IFwP
Date Processed by STIC: 2/8/07

ENTERED



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/574,730

DATE: 02/08/2007
TIME: 11:40:15

Input Set : A:\5853-454.txt
Output Set: N:\CRF4\02082007\J574730.raw

3 <110> APPLICANT: BURNE, ROBERT A.
 4 CHEN, YI-YWAN MARGARET
 6 <120> TITLE OF INVENTION: RECOMBINANT ALKALINIZING BACTERIA
 8 <130> FILE REFERENCE: 5853-454-1
 10 <140> CURRENT APPLICATION NUMBER: 10/574,730
 11 <141> CURRENT FILING DATE: 2006-04-06
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2004/033214
 14 <151> PRIOR FILING DATE: 2004-10-07
 16 <150> PRIOR APPLICATION NUMBER: 60/509,175
 17 <151> PRIOR FILING DATE: 2003-10-07
 19 <160> NUMBER OF SEQ ID NOS: 50
 21 <170> SOFTWARE: PatentIn version 3.2
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 8497
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Streptococcus salivarius
 28 <400> SEQUENCE: 1
 29 gattctcaac attattgtca ttgcttatgg agcttgtaca gggcaaggcg ctgaatggtt 60
 31 ttatggtagc gccacaggc ttttatttgc cttcacctac cttaactcag ctatcaatac 120
 33 gatttcgat tttgatcaac gtttgtatgg gtggtttagt ttatgtgg caattaatac 180
 35 gctaccagca gggattctt gcttaacatc tggatacggg gtataatgctt ggtatggat 240
 37 tatttggttc ttgtgggtt tcctatggct aactgcctt attgaaatata acctaagaa 300
 39 gaaccttagga aaatttgcctt cttaccttagc tattttgaa ggaattgtaa cagcttggat 360
 41 tccggggctt ttgatgctt gggcaagtgt gtaagcattt attaaggag gaaaaacgtat 420
 43 gcaattgaca atgcgtgagc agaaaaaaaaat gatgattagc cttgcggcta tgattgctca 480
 45 acgacgtaaa gataaaaggaa tcaaattgaa tcattccagaa gcgggtgc ttgattacaga 540
 47 ctatgtgctt gaagggtcaa gagaaggtaa aacgggtgcc caattgtatgg atgaagctcg 600
 49 caatctttta acacgtgaag atgttatggaa aggtattgcg gaaatgatc caatgattca 660
 51 agttgaagct acttttacgg acagtacaaa actggtaact gttcatgatc ctattcagta 720
 53 aggagaaaatg taatgattcc aggtgaatac catgtggcga gtgagccat tgattataac 780
 55 ggtggttacg aagccatttag tcttgaagtgg aaaaatgtgg gtgaccgtgc tgctcaagtg 840
 57 ggctctcaact accattttta tgaagcaaac gaatctggc ttcaatggta tcgtaaaaag 900
 59 gcgcgaggca aacgtctaga tattccagca ggtacagcca ttgcgtttga gccaggtgaa 960
 61 acggaaaacag tacaacttat tgactttggaa gggaaacgtc gtatggatgg tttcaataac 1020
 63 aaggtaatg gtttcttaga cttagaaagag gacaatcga tgatggatgg aatggatcgt 1080
 65 gaagagttatg ctcaacacta tgaccaact gtaggtgata gcgtacgtct tggagatacc 1140
 67 aatcttttttgc cagccatttgc aaaagactttt actgtttatg gacagggatc taagttcggt 1200
 69 ggcggtaaag ttttgcgtga tggatgggtt gttatgtcta cggaaacacg tgacaatcca 1260
 71 tcagttgttg ataccattat tacaggtgca accatcatttgc actatacagg tattattaa 1320
 73 gcagatatcg gtattcgtga tggtaagatt gttgcatacg gtcgcgggtgg taaccaggat 1380
 75 acaatggaca atgtggactt tggatgggtt gctatgtacag aagccattgc tgctgaagg 1440
 77 ttgattgtga ctgctgggtt tattgacctt cacgtgcactt atattctgc cgacatttcct 1500
 79 gaatttgggtt tggataacgg gattactacc ctcttgggtt gtggacttgc ttctgctgat 1560

sel P. b

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/574,730

DATE: 02/08/2007

TIME: 11:40:15

Input Set : A:\5853-454.txt

Output Set: N:\CRF4\02082007\J574730.raw

81	ggaagtaatg	cgacaacttg	tacaccaggtaaattccata	ttactcgtat	gttgcaagct	1620
83	gttgcata	tgcctgctaa	ctttggtttc	cttgccaaag	gtgttggttc	1680
85	gtgggtgaag	agcaaattaa	ggccggtgca	gcaggaatta	aaacacacga	1740
87	gcgacttacg	caggatttga	taattccctt	aaagttcggt	ataaatacga	1800
89	gcgggtcaca	ctgactctt	aatgggggt	ggatttatgg	aaaatacttt	1860
91	caaggtcgta	ctgttcatac	cttccacacc	gaaggttcag	gtgggtggaca	1920
93	atcatggttt	ttgctggtaa	ggaaaatatt	ttgccatcat	caactaaccc	1980
95	tacaccacaa	atgctattgg	tgagttgtta	gatatggta	tggttgccca	2040
97	ccaaaaattc	cagaagacgt	ctctttgtc	gaatcacgt	tacgtaaaca	2100
99	gcagaagacg	ttcttcacga	tatgggtgcc	cttagtatca	tgacttcaga	2160
101	atgggacgtg	tcggtaagt	ggccatgcgt	tggtggcaac	tggctgataa	2220
103	cagcgtggtc	cacttgaagg	ggattcagag	tttaacgata	ataaccgtat	2280
105	gtggctaaat	atacaattaa	ccctgccatc	accaatggta	ttcagacta	2340
107	gtagaagttg	gtaaatttgc	agatttgggtt	atctgggaac	cagctcaatt	2400
109	cctaagttgg	tgcttaaggg	ttgttatgcta	acttatggtg	ttatgggtga	2460
111	agtcttccaa	cacctaacc	acgtatcatg	cgtaaattat	atggtgctta	2520
113	gttcatgaaa	caaattttac	atttggttt	caatatgctt	atgatcacgg	2580
115	gaaattgggtt	tgaataagat	tttcttcct	gttaagaata	cgcgttaactt	2640
117	gatatgaagc	ttaatgacta	cgctccaaaa	acaatccgt	tcgatccaca	2700
119	gtcttatttgc	atgatgagtt	gttacttgt	gaaccaatcc	atacgacatc	2760
121	cgttatttct	tgttctaagg	aagacgttat	ataaaatgagg	ctgaaatttt	2820
123	tctttgtat	tttataccca	taacgttttt	agtgtttat	taagttgcta	2880
125	atgcttagatt	tttaaaatgt	aatagaaaaag	gaaaaagtt	gatttttaca	2940
127	ctcttgcata	agatatctat	gtggacaaaat	accatattga	aacagtctt	3000
129	atgaccttaa	caaaaaaaaaatt	attcgtgtga	agagtgtca	tggaaatgaa	3060
131	gtcttgataa	gggacaaaaaa	ttgcaaaatg	gctctgcctt	ttttatcgat	3120
133	tccttagctat	ttgtgttgag	tcacaggatt	tgattgtcat	ttcacctaaa	3180
135	aaatggaaat	cacagctcac	attcttggga	atactcataa	accgatttgg	3240
137	ccaagattta	tttagaggtt	gatccagttt	tagagcaagt	tttgactcaa	3300
139	cctacacgt	tgaagaagtg	gtccttgata	agcccctacg	ccatgtgaat	3360
141	atgaacattta	atcccttgc	taatgtgtct	ttgcaagattt	atcttgcata	3420
143	gtcgattcaa	cctttccat	tggatcattt	aaccactt	ttggatgga	3480
145	cgcgaagaca	ctgtacacaga	tgataaaagg	tacgaggagt	ggcaagaagc	3540
147	agtcttgcata	aatatgggtga	aggctttgtat	atcaaattgg	tttatgtatc	3600
149	gacaacttag	agcagggttt	gcattatgtat	aaggcttgcgt	cagtttcgac	3660
151	gaaacaagac	aggggactaa	aatgattgtct	aaacaaaatgc	ttcgacttat	3720
153	catgctatttgc	cggtatttgg	tgactatcag	tccaaaatac	gttgggtga	3780
155	aatccagcta	ttgtcttgc	actctatgtt	tttaacaagg	gttggatgat	3840
157	attgcacttt	atggctatag	cgtgatttcg	acgatgggtt	aaaatgtgt	3900
159	ccacttggac	agtttgcgtt	acaagagattt	gttttacgtt	gttttcaca	3960
161	atgacacacaag	aaattcaaga	actggatgcg	tcctacccgtt	gggccaatac	4020
163	gaatttagctc	agatgaaaca	tgaaacacag	gtattccgccc	tattcatgtc	4080
165	aacaagggtt	agagaaaaaa	acaatgacaa	aacgtactgt	aattatttgg	4140
167	ctgttggttc	agttaaaacc	cttttgcctt	agcgtttac	acgacgtat	4200
169	atttagcgt	tattactaac	gatatctata	caaaaagaaga	tgctttttc	4260
171	attcaagctt	agatgaaagac	cgtatcatttgc	gtgtagaaac	ttggatgtgt	4320
173	ctattcgtga	agatgcctct	atgaacttttgc	aagcgatttgc	aactcttcaa	4380
175	accatgattt	ggatgttattt	ttcccttgaaa	gtggggggaa	taacttggt	4440
177	gtcctgattt	ggttgatttgc	accatttata	ttattgacgt	tgctcagggt	4500

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/574,730

DATE: 02/08/2007

TIME: 11:40:16

Input Set : A:\5853-454.txt

Output Set: N:\CRF4\02082007\J574730.raw

179	cacgtaaggc	tggtaaaggc	atgattaaga	gtgatttgc	cttgatcaat	aagactgacc	4560
181	ttgctcccta	tgttgagcc	aaccttagacc	gtatcggtga	agataccctt	cattccgtat	4620
183	acaaagattc	tttcattttc	acaaatttga	ataatgtga	caatgttaag	gaagtggaa	4680
185	aatggattcg	taagaatttc	ctactagagg	acttgtaaga	tgacacaagc	atacgatggc	4740
187	tttgcacatc	ttggattttc	aaaccgaaat	ggtcgtacaa	tttcccacaa	gaaataccaa	4800
189	gaaggcaact	ctcgagttac	ggcggataat	tcagatgcc	acgggttcc	ttactatttc	4860
191	cttcattata	tgggtggggg	atttgcgag	ggtgagcgt	atcaagtgc	cattgtatgtt	4920
193	aataaagatg	ctcatgcctt	gttaacaacc	caaacaccta	cctatgttta	caagtgtgag	4980
195	aaaggacagt	tgacacatca	gaatacgccc	atcacacttg	aagaaaaatag	ctatttggag	5040
197	tacatggctg	atgaagtcat	tccctatttgc	agatcacgct	atttccaaac	aagtgcgtatt	5100
199	gatatggata	agtctgccc	cttgatttat	tcagatggtg	tgacggcagg	tttgtctcat	5160
201	gaggatttgc	cgttcaata	ccattatttgc	cgtaatttgc	cacaaatcta	ccaagatgt	5220
203	gagcttgc	atagcgatca	gaccctctt	gagcctcaga	aacaagatata	gtttaaactt	5280
205	ggttattttgc	aaggctggcg	taattataat	agttggtaa	tttgtgtcacc	aaatattgac	5340
207	gaggctttgc	ttaaggctt	gcagaagcac	ttagaaaatc	tgaatttgc	gtctgatttt	5400
209	gctatttcat	ccttagatat	cccggtctg	gtgttacgt	tctttagggaa	aactgctgag	5460
211	gataatcgtc	gcgtcatttgc	ttcttgc	gactatttgc	gacaagaaat	acatggattt	5520
213	acccttttgc	atttgcgaaa	aatgtatgc	aggagataaa	aatgcataat	tcctgaaaat	5580
215	tacttaagcc	ctatgacttgc	tgccggcaatg	ggggcaggtt	ttgtgcctat	tttgtataag	5640
217	gctgtcaagg	aagtgcgggt	aaagggttgc	actgataaaa	aaacgattcc	tatgttggaa	5700
219	atccggactt	ccttgcctt	ccttgcatttgc	atgttataatc	ttccagcccc	agggtggaa	5760
221	agtgcccat	ctgtttttgc	agtgcatttgc	gttatattat	taggaccttgc	ggcctcctgt	5820
223	ttagcatttgc	gtgtgcgtt	agctatgc	gtttgcatttgc	tttgtgtatgg	tttgttttgc	5880
225	gcctttgggt	cgaatgcctt	ttgtatgttgc	gttgtcatgc	catttgcggg	ttatgtctgtt	5940
227	tataaactct	tgaataatgc	gacgaaagaa	aggataatttgc	ctagcttttgc	tggagggtat	6000
229	atttgcatttgc	tagttgcggc	cctaacttgc	gcgggttttgc	taggaatca	accgatttgc	6060
231	ttttaaagata	gcagttgttgc	tccgcatttgc	aatccatacc	ctttgagatgt	gacgcttcca	6120
233	gtatgggc	tgactcacct	gcttatcggc	tttgttgc	gattttttgc	agccgggttgc	6180
235	caagaattca	ttgaacgttgc	aatatttgc	aataactcagg	aaataacgc	taaaaaacta	6240
237	cgtcctttat	tgtctttat	cctagccttgc	attatcctaa	cgccacttgc	tttattttgc	6300
239	acgggaacag	cttttgcaga	atgggatgtc	aaagagttgg	tagaaaaatttgc	tatgttgcatttgc	6360
241	catgtggaa	cccaagcgcc	aaaaggaaat	ttgaatgttgc	tttgcatttgc	tgccttgc	6420
243	ccagattata	gtatgc	cattccagaa	gtttttttgc	atatcctgc	cgctgccttgc	6480
245	gctgttttgc	ttttttcat	cctctatgc	ttgtttttgc	gtagaaaggt	tgaaaaatgt	6540
247	ttctgc	ttggatgttgc	gaagagcgcc	cagtagtgc	taaagtgcgtt	agaaataact	6600
249	ttcttatcc	gaatcgatca	catctggaa	ctcttgcatttgc	aaagtttgc	acgcatttgc	6660
251	taaaaatgc	atcatttttgc	catccaaacag	ctaagttttgc	acttcttgc	ttcttacttgc	6720
253	tttcattttgc	aatttgc	aatctc	ttttgtttgc	tgtgttgc	tttttaggat	6780
255	ctggcggttgc	tttttttgc	catttgc	ttgtttttgc	ttttttttgc	ttttttttgc	6840
257	tgttgcatttgc	cccttgcatttgc	tttttgcatttgc	cgcatcttgc	acttagcggttgc	ggtcaatgc	6900
259	tcttttttgc	tagacttgc	ttgttgc	tagcatttgc	ttttttttgc	ttttttttgc	6960
261	caataatgc	gatgttgc	gcatttttgc	gatttgcatttgc	ttcttgcatttgc	ttttttttgc	7020
263	agttgcatttgc	caccatata	tatatttgc	tccttgc	aaatttgc	gatttgc	7080
265	aagggttgc	agcgc	aatatgc	tttgc	ccggatttgc	ttttttttgc	7140
267	ggggatgttgc	atacc	tttgc	atgttgc	actgacttgc	ttttttttgc	7200
269	cacgttgc	tgttgc	ttgttgc	atgttgc	ttttttttgc	ttttttttgc	7260
271	tggccttgc	aagtgc	ttgttgc	ttgttgc	ttttttttgc	ttttttttgc	7320
273	tttcaatttgc	atcaatgc	tttgc	ttgttgc	ttttttttgc	ttttttttgc	7380
275	ttggagatgc	gacaaggaca	atatgttgc	ttgttgc	ttttttttgc	ttttttttgc	7440

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/574,730

DATE: 02/08/2007
TIME: 11:40:16

Input Set : A:\5853-454.txt
Output Set: N:\CRF4\02082007\J574730.raw

277	agtcttatca	gtttattaac	tggcttcaag	caggaagaat	ctggacgtat	tctttctta	7500
279	ggaaggacc	tcaaagaatg	gctgaaggac	aaacgtcaaa	aacgagattt	ttatagccgc	7560
281	ctcggaatcc	tcttcagga	tgtggatagt	caattattta	atagtactgt	ctatgatgag	7620
283	attgcttttg	gtcctcgta	gctaggctg	accgaagaag	aggctctaca	gcgggtccaa	7680
285	gacacactgt	ccctgcttaa	aattgaagat	ttaagggatc	gcgttcccta	tcaactgtct	7740
287	ggtggagaaa	agaagaaaagt	ggccttgcc	agtatcatgg	taacgaatcc	agatgtgtat	7800
289	attctttagat	aacccttcaa	taatcttct	aaagaatatg	aagaattttt	taggaaacctt	7860
291	ctacatgaac	ttcattcagc	tgggaaaaacc	attattatgt	ctgctcatca	cttcaagcac	7920
293	cttcatcatg	aaaaggctga	tgttcttctt	tttgaagatg	gcaaagctga	tttctttct	7980
295	gcccaggaag	tgctcaataa	ccagcaagtg	attgagcggt	tgtcacattt	ttaataacta	8040
297	taagtaggaa	atcgttattt	gttttctact	ttttctttgt	caaacaatta	atacttttag	8100
299	gtgatagttat	tttcttatca	ccttgattat	gtttaagtat	tagttaagcc	tagtgaattc	8160
301	tgttacaata	aaaacaatca	atctcaaagg	agagtattat	gaaacttaaa	aaaattcttg	8220
303	gaattacagg	tgttagtatt	gcttcagtag	ctttgcttgc	tgcattgtca	tctaaatcat	8280
305	caaagaagc	atctaaatct	tcaggtgcta	aagaacaat	taactttgcc	actgttggga	8340
307	caacagcacc	attctcatat	gaagaaaaatg	gtgaattgac	tggttacat	gtggaaagtgg	8400
309	ccaaaggcgt	cttcaagac	tctgacaaat	atgaagtgaa	attccaaaaa	acagaatgg	8460
311	cttcagttt	cacaggtat	gactcagcta	aatacca			8497
314	<210>	SEQ ID NO:	2				
315	<211>	LENGTH:	9398				
316	<212>	TYPE:	DNA				
317	<213>	ORGANISM:	Streptococcus gordonii				
319	<400>	SEQUENCE:	2				
320	taattatagg	aaattatttg	cctaaaaaag	tacaagaaaa	cagacgcccc	ctgaatagaa	60
322	aactggctt	tctttttgtt	ggaataggat	ttttattgtt	tgttaattgt	atcttctgtt	120
324	tgtaaaggcaga	atacatagat	atatctttat	ttgtaaagcgt	atttatgata	tactgtcatt	180
326	atcaaataata	aaagggttat	tatgattat	aaggAACATT	atcggtttat	ccggccagcat	240
328	cctgcatttgc	agaattttcc	agtagagtct	tttgataat	tagccattga	aattcaattt	300
330	cataagggtt	cgaaaggcgtca	aattatctt	ttttctggag	atcggcgtga	tcgccttjt	360
332	cttcctatc	aaggatatgc	tgcataatgaa	cagtagatg	ctaccgatac	ttttcttat	420
334	actgattata	taaaaaaggg	gaatgtttc	ccttatggtg	gcatcttctt	tgtgagcgc	480
336	tatcattata	ctgcaagtgc	tgtgacacag	gtggaatatt	tttagtattcc	tatgaaattt	540
338	tttgaagatt	tttcttaagaa	aaatgtgaat	cagctgtgt	ttattacgca	gaaactatcc	600
340	agaatcttgg	agtttcaaga	attacgcttgc	cgaaatgttgc	ttgcggcgtcag	tgcaacagac	660
342	agagttgttc	agtcccttc	gatcttatgt	atggatttat	gcaaaacagg	ggatgttttgc	720
344	ccatttccaa	tttagtatgaa	ggagttggct	aaactaggag	ctacaacccg	tgaacacagtt	780
346	aaccagggtt	tcaaaaagggtt	gagagaagaa	ggccgtatca	gctatgagca	caaacagttg	840
348	gttttactg	atagagaata	ttttatgaaa	tatttcaaag	aaagtttagtc	tactggacccg	900
350	actttctttt	tttagaaaaaa	acaaagattt	tataaaaaaa	taaatattcg	caaaaatcat	960
352	aaaagatata	aaatatgcaa	agaaaacgtt	tcaaaacata	aaaaaaatttta	aaaaaaatct	1020
354	aaaagtata	aaaatttggc	attttagagtg	tcagttttt	tgtgtaaatgt	tttcaaaaaa	1080
356	atgcttagat	aatatatgtt	aacgggctt	ggaaaaaccta	aaccgcaaaag	aacaaggagg	1140
358	aaagtagatgt	tctacacatc	caattcatgt	tttctcagaa	atcgaaaaac	tgaaaaaaagt	1200
360	tatgttacat	agacctggta	aagagttgga	aaactttagtgc	ccagactatc	tgcgttct	1260
362	tctctttgtat	gatattccgt	tttggaaaga	tgcacaaaaaa	gaacacgaca	actttgctca	1320
364	agcgcttcgc	aatgaaggta	ttgaagtgt	atatctagaa	aaactggctg	ctgagtcttt	1380
366	gacctcacca	gaaattcgcg	accaattcat	cgaagaatat	cttgcatttgc	caaataatccg	1440
368	cggaacggccaa	actaaagggtt	ctattcgtga	gttgcatttgc	ggttattaaag	ataaccaaga	1500
370	attgggttggaa	aaaacaatgg	ctgggttaca	aaaagctgaa	ttaccagaaaa	ttccagaagc	1560

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/574,730

DATE: 02/08/2007
TIME: 11:40:16

Input Set : A:\5853-454.txt
Output Set: N:\CRF4\02082007\J574730.raw

372	agcaaaaggc ttgactgact tggtagaatc agactatcca ttgcgtatcg atccaatgcc	1620
374	aaacctttac ttcacacgag atccatttgc tacaatttgtt aacgcagat cactcaacca	1680
376	catgtatgca gatacacgta accgcgaac ttgttatggt aaatatatct tcaaatacca	1740
378	tccagtttat ggtggaaatg ttgagcttgc ttacaatcgt gaagaagata ctgcgtatcga	1800
380	aggtggagat gagttggttc ttctaaaga tgtattggca gttggtatct cacaacgtac	1860
382	tgtatgctgca tcaattgaaa aatttgttgtt aaacatctt aagaaaaaacg ttggcttcaa	1920
384	gaaagtattt gctttcaaat ttgctaaca ccgtaaaattt atgcacttgg atacagtctt	1980
386	cacaatggta gactacgata aatttactat tcaccagaa atccaaaggca atcttcgcgt	2040
388	cttctctgta acttacgaaa acgaacaattt gaagatcggtt gaagaaaaag gtgatttggc	2100
390	agaacttctt gctgaaaacc ttgggtgttga aaaagtaaca ttgattccat gtggagatgg	2160
392	caacgctgtt gctgcagcac gcgaacaatg gaacgatggt tcaaacaactt ttacaatcgc	2220
394	tccaggtgtt gttgtgtgt atgaccgcaa tacagttact aataagaaat tagaagaata	2280
396	cggcttacgt ttgattaaga tccgcggaa tgaattgggtt cgccgtcggt gtggacctcg	2340
398	ttgtatgtca atgccattcg aacgtgaaga aatctaaacg ttcaatatct taagaaattt	2400
400	taatagatag aaagagggaaa taaaagaatg acaaatttgc tattccaagg acgtagcttc	2460
402	cttgcagaaa aagactttac ccgtgcagag ttgaaatacc ttattggctt ttcaagctcac	2520
404	ttgaaagatt tgaaaaaacg taacatttgc caccgttacc ttgctggtaa aaatatcgct	2580
406	ctcttgtttgg aaaaaacatc tactcgatcg cgtgcagcct ttactacagc agctatcgac	2640
408	cttggcgcac atccagaata tcttggtgtt aatgatatttgc agcttggtaa aaaggaatca	2700
410	actgaagata cagctaaagt ttggggccgtt atggttgcgtt gtattgaattt ccgtgggttc	2760
412	agccaaacgtt tggttgaaga attggcagaa ttctcagggtt ttccagtttgc gaatgggttgc	2820
414	actgacgaat ggcacccaaatc tcaatgttgc gctgactact tgacagttca agaaaaacttt	2880
416	ggtcgcttag aaggcttgcatttgcgttgcatttgcgttgc gacgtaaaca cgttgctaat	2940
418	agcttacttag tgactgggttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3000
420	ctcttcccac aacaagaaat tggttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3060
422	cacatcttac ttacttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3120
424	gacgttttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3180
426	ccataccacaaat tggttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3240
428	cactgcttgc ctgtttccatc ccgttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3300
430	tttggcgttag aagaatggatc agtacttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3360
432	ttcgaccaatc cggaaatggatc agtacttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3420
434	aatctttaca ttccaaaatgcgatc agtacttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3480
436	gagggctgcg actaataatgcgatc ttgtccgccttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3540
438	tctaaatttgcgatc agtacttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3600
440	tgcgttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3660
442	catccttcac ttgttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3720
444	gcatttgggttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3780
446	tcaagttagatc agtacttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3840
448	tccacttcgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3900
450	tttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	3960
452	agtgggttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4020
454	ctattcagatc agtacttgcatttgcgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4080
456	cgctggacgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4140
458	cgacacaatc agtacttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4200
460	tatcacttcgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4260
462	agactttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4320
464	aggagtagatc agtacttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4380
466	taatgttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4440
468	tccaaaatgcgatc agtacttgcatttgcgttgc gttatgttgc acatcttc tccaaaagaa	4500

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/08/2007
PATENT APPLICATION: US/10/574,730 TIME: 11:40:17

FYI
Input Set : A:\5853-454.txt
Output Set: N:\CRF4\02082007\J574730.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 1336,1353,1392,1450,1698,1734

Seq#:19; N Pos. 3,10,14

Seq#:20; N Pos. 6,18

Seq#:22; N Pos. 7

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/574,730

DATE: 02/08/2007

TIME: 11:40:17

Input Set : A:\5853-454.txt

Output Set: N:\CRF4\02082007\J574730.raw

L:716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1320

M:341 Repeated in SeqNo=3

L:1322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0

L:1342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0

L:1366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0